

CLAIMS

1. Melt filter (1) for purifying especially plastic melts discharged by extruders, with a filter disk (3), which is installed between two plates (5, 5') that form a housing [2] equipped with a filter element changing station (7), can be rotationally driven by a power-driven ratchet drive (4), and has recesses that are separated by webs (11) and arranged along a circular path for holding exchangeable filter elements (8), which are supported by means of perforated disks against the forces that arise due to the pressure drop that occurs in them in the direction of flow of the plastic melt, and with a melt channel (9), which passes through the plates (5, 5') in the area of the circular path, feeds the melt to the filter elements (8), and widens towards the filter elements (8), characterized by the fact that the plates (5, 5') completely cover the filter disk (3), with at least one of the plates (5, 5') being interrupted by the filter element changing station (7), and that the filter element changing station (7) is designed to be larger than one filter element (8) and smaller than or the same size as two filter elements (8, 8').

2. Melt filter in accordance with Claim 1, characterized by the fact that at least one of the plates (5, 5') has a reversibly movable region that covers the filter element changing station (7), that the filter disk (3) is completely covered during the operation of the filter and is closed snugly towards the filter disk, and that the filter element changing station (7) is uncovered for the filter element change.

3. Melt filter in accordance with Claim 1 or Claim 2, characterized by the fact that the given distance between filter elements (8) against which the melt is flowing and the filter element changing station (7) is larger than or the same size as the width of one filter element (8) and a web (11) and smaller than the width of two filter elements (8, 8') and a web (11).

4. Melt filter in accordance with Claim 3, characterized by the fact that the ratio of the web area against which the melt is flowing to the area of the filter disk (3) through which melt is flowing is less than 18% and greater than 12%.

5. Melt filter in accordance with Claim 4, characterized by the fact that the ratio of the web area against which the melt is flowing to the area of the filter disk (3) through which melt is flowing is 14% to 16%.

6. Melt filter in accordance with one or more of Claims 3 to 5, characterized by the fact that, for each stroke of the ratchet drive (4), a maximum of 10% of the area of the filter disk (3) against which the plastic melt flows can be exchanged for a corresponding filter disk area with unused filter elements (8).

7. Melt filter in accordance with Claim 6, characterized by the fact that, for each stroke of the ratchet drive (4), 5% to 7% of the area of the filter disk (3) against which the plastic melt flows can be exchanged for a corresponding filter disk area with unused filter elements (8).